



**Directory of Indian Organisations Concerned With the  
Promotion of the use of New and Renewable  
Sources of Energy**

**TATA ENERGY RESEARCH INSTITUTE**  
DOCUMENTATION CENTRE

Bombay House, 24 Homi Mody Street, Bombay 400 023.



## INTRODUCTION

Within the frame work of its new and renewable energy information programme, being launched in 1981, Unesco, in cooperation with the U.S. Solar Energy Research Institute is compiling and publishing an International Directory of Research Centres and Information Services in the field of new and renewable energy. Unesco plans to publish the Directory in August 1981.

On behalf of Unesco, the information pertaining to India was collected by the Documentation Centre of Tata Energy Research Institute. The information received so far from about 100 organisations may be found in the following pages.

N. K. Gopalakrishnan

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## CENTRAL GOVERNMENT AGENCIES

1. Government of India,  
Dept. of Science and Technology,  
New Mehrauli Road,  
New Delhi 110 029.

Contact :

Mr. Mahesh Dayal.

Affiliated Organisations :

1. Council of Scientific & Industrial Research
2. Survey of India
3. National Atlas & Thematic Mapping Organization
4. National Museum of Natural History

2. Government of India,  
Ministry of Agriculture,  
Dept. of Agriculture & Cooperation,  
112-B Wing,  
New Delhi 110 001.

Contact :

Dr. K. C. Khandelwal,  
Specialist (OF).

3. Government of India,  
Ministry of Energy,  
Dept. of Coal,  
Shastri Bhavan,  
New Delhi 110 001.

Contact :

Mr. P.K.G. Nair,  
Section Officer.

Dept. of Coal (Contd.)

Affiliated Organizations :

Central Fuel Research Institute,  
P.O. FRI,  
Dhanbad 828 108.

Central Mine Planning & Design  
Institute,  
Gondwana Place,  
Kankeroad,  
Ranchi 834 008.

Government of India,  
Ministry of Industry,  
Bureau of Industrial Cost & Prices,  
7th floor,  
Lokanayan Bhavan,  
Khan Market,  
New Delhi.

Contact :

Mr. L. Kumar.

Acronym of Orgn.

BURINDCA PS.

## RESEARCH AND INFORMATION CENTRES

- ✓1. Advani-Oerlikon Ltd. ,  
Energy Systems Group,  
R&D Division,  
Chinchwad,  
Pune 411 019.

Contact :

Mr. G. Satyanarayana,  
Head, Energy Systems Group.

Affiliated Or:n. :

Semi Conductors (India) Ltd.

Phone Number :

82351.

Type of Or:n. :

Private.

Description of Orgn. :

An industrial firm also conducting research in the areas of welding electrodes, welding equipments, industrial and power electronics, solar energy, electrical motor and controls and air pollution.

Type of Research :

Applied and developmental.

Technical Areas of Interest :

Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy



2. Aero Agencies Pvt. Ltd.,  
112, Meadows Street,  
Bombay 400 023.

Contact :

Mr. N. Seth,  
Director.

Phone Number :

Resi. - 360212; Office - 274425, 273378.

Telex Number :

011-3134 ABC "AERO".

Cable :

AIRAGE.

Type of Orgn. :

Private.

Description of Orgn. :

Travel Agency. Director is personally interested in the development of devices for the utilisation of renewable sources of energy.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

3. Agricultural Tools Research Centre,  
Suruchi Campus,  
P.O. Box 4,  
Bardoli 394 001.

Contact :

Mr. Mohan Parikh,  
Director.

Affiliated Orgn. :

Khadi Gramodyog Prayog Samiti,  
Ahmedabad.

**Agricultural Tools Research Centre (Contd.)**

**Phone Number :**

95 and 258.

**Type of Orgn. :**

Voluntary Organization.

**Description of Orgn. :**

The Centre has designed and developed about 60 improved, scientific agricultural tools and implements. Energy research includes development of biogas digesters and flat plate solar cookers.

**Type of Research :**

Applied and developmental

**Technical Areas of Interest :**

Biomass/Bioconversion - General

Solar Thermal Energy

Appropriate Technology for rural development.

4. Aligarh Muslim University,  
Z.H. Engineering College,  
Mechanical Engg. Dept.,  
Aligarh.

**Contact :**

Prof. S. Aktar Husain.

**Phone Number :**

5970.

**Type of Orgn. :**

Academic.

**Type of Research :**

Applied and developmental

**Technical Areas of Interest :**

Biomass/Bioconversion - General

Alcohol Fuels

Fuel Wood and Charcoal

Photovoltaics

Solar Heating and Cooling

Wind



- ✓6. Annamalai University,  
Dept. of Mechanical Engg.,  
Annamalainagar 608 002.

Contact :

Prof. V.R. Muthuveerappan,  
Head of the Dept.

Phone Number :

548 (Chidambaram).

Cable :

RICENTRE (ANNAMALAINAGAR).

Type of Orgn. :

Academic.

Description of Or . n. :

The University was founded in 1929 as a unitary,  
teaching and residential University. The courses  
of study offered are the Under-graduate, the Graduate,  
the Post Correspondence Courses.

Type of Research :

Applied and developmental.

Technical Areas of Interest :

Solar Thermal Energy

8. Architects Collaborated,  
10, Middleton Row,  
Calcutta 700 071.

Contact :

Mr. Syamal Kumar De Sarkar,  
Partner.

Affiliated Or . n. :

ACME Consultants Pvt.Ltd. (ACPL).

Phone Number :

24-2458; 21-2476.

Cable :

CONCEPT.

Architects Collaborated (Contd.)

Type of Or·n. :

Private.

Description of Orgn. :

Architects Collaborated was founded in 1983 with a group of professionals in architecture, engineering, town planning, traffic and transportation planning and environmental engineering who have enriched their experience in their respective fields over the years.

Technical Areas of Interest :

Biomass/Bioconversion - General

7. Auto Spare Industries,  
Wind Energy Div.,  
Pondicherry 605 009.

Contact :

Mr. Vijay C. Shah,  
Partner.

Phone Number :

3174/794.

Type of Or·n. :

Private.

Description of Orgn. :

Designing and fabricating facilities for developing prototypes of windmills for water pumping and electrical generation. Manufacturing facility and installation of windmill for water pumping upto rotor diameters of four meters and steel towers of fifteen meters are being currently done.

Type of Research :

Developmental

Technical Areas of Interest :

Wind

8. B.S. & Services Pvt.Ltd. ,  
53/57, Laxmi Insurance Bldg. ,  
Sir P.M. Road,  
Bombay 400 001.

Contact :

Mr. R.N. Mohanty,  
Engineer-in-charge,  
Solar Energy Development.

Phone Number :

383031; 295578.

Telex Number :

011-2527.

Type of Orgn. :

Private.

Description of Orgn. :

The company manufactures gas cooking ranges  
and solar energy equipment like water heaters  
and other solar energy equipments.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

9. Bhabha Atomic Research Centre,  
Ore Extraction Section,  
Trombay,  
Bombay 400 085.

Contact :

Dr. N.S.K. Prasad,  
Scientific Officer.

Acronym of Orgn. :

BARC.

Phone Number :

523321 ext. 604.

**Bhabha Atomic Research Centre (Contd.)**

Telex Number :

011 - 2817.

Cable :

BARC - BOMBAY, CHEMBUR.

Type of Orgn. :

National Government.

Description of Orgn. :

Nuclear Research Centre.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and Developmental

Technical Areas of Interest :

Photovoltaics  
Solar - General

10. Bharat Heavy Electricals Ltd.,  
NCES Group,  
Corporate R&D Div.,  
Vikas Nagar,  
Hyderabad 500 583.

Contact :

Mr. Syed Basheer Ahmed,  
Senior Engineer.

Acronym of Orgn. :

BHEL.

Phone Number :

261988.

Telex Number :

0155 - 404.

Cable :

BHELDEV.

**Bharat Heavy Electricals Ltd. (Contd.)**

Type of Or:n. :

National Government.

Description of Or:n. :

Manufacturers of thermal power plants, transformers turbines, compressors, ceramics, hydel power plants, special equipment manufacture and design for steel, metallurgical, mining, fertilizer, chemical sugar, paper and railways. Employs 60,000 people in the manufacturing units spread over India.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Conservation  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind  
Waste Heat Utilization

11. Birla Institute of Technology & Science,  
Pilani 333 031.

Contact :

Dr. V.K. Tewary,  
Dean of Research & Consultancy.

Acronym of Or:n. :

BITS.

Phone Number :

Pilani - 138.

Cable :

BITS, PILANI.

Type of Or:n. :

Academic.



**Birla Institute of Technology & Science (Contd.)**

Description of Orgn. :

Privately supported university with several practice school and collaborative education stations at various industries in different cities. Has under-graduate and post-graduate programmes with several educational innovations like broad based interdisciplinary teaching and research in close collaboration with industry.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Waste Treatment  
Teaching of Science  
Computer Science

**12. Calicut Regional Engineering College,  
Kerala 673 601.**

Contact :

Mr. V. K. Damodaran,  
Asst. Prof.,  
Electrical Engg. Dept.

Acronym of Orgn. :

Calicut R. E. C.

Phone Number :

23 Kunnamangalam (Calicut).

Type of Orgn. :

Academic.

Description of Orgn. :

Imparts instruction in undergraduate and post-graduate engineering courses and is supported by the Central and the State Governments.

Calicut Regional Engineering College (Contd.)

Type of Research :

Applied and developmental

Technical Areas of Interest :

Conservation

Solar - General

13. Central Arid Zone Research Institute,  
Div. of Wind Power & Solar Energy Utilization,  
Jodhpur 342 003.

Contact :

1. Dr. J.P. Gupta,  
~~Scientist-3,~~  
Incharge, Solar Energy Section.
2. Mr. S.C. Chawdhry,  
Incharge, Wind Power Utilisation.

Acronym of Orgn. :

C.A.Z.R.I. Jodhpur (India).

Phone Number :

23986.

Cable :

ARIDZONE, JODHPUR.

Type of Orgn. :

National Government.

Description of Orgn. :

The Institute is also concerned with harnessing of solar energy and other renewable sources of energy. A national institute under the Indian Council of Agricultural Research (ICAR).

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General

Fuel Wood and Charcoal

Conservation

Solar - General

Central Arid Zone Research Institute (Contd.)

Technical Areas of Interest

Solar Heating and Cooling

Solar Thermal Energy

Wind

14. Central Electrochemical Research Institute,  
Div. of Chemical Physics,  
Karaikudi 623 006.

Contact :

Dr. C.V. Suryanarayana,

Asst. Director.

Acronym of Or. n. :

CECRI.

Affiliated Or. n. :

Laboratories in Physical & Chemical  
Group of CSIR.

Phone Number :

368.

Telex Number :

0455 - 285.

Cable :

CECRI.

Type of Orgn. :

National Government.

Description of Or. n. :

Central Electrochemical Research Institute is one of the national laboratories under the Council of Scientific & Industrial Research. The work on solar energy conversion is being done in the Div. of Solid State Electrochemistry.

Type of Research :

Applied and developmental

Central Electrochemical Research Inst. (Contd.)

Technical Areas of Interest :

Photovoltaics

Solar - General

Solar Thermal Energy

- / 15. Central Electronics Ltd.,  
Industrial Area 4,  
Sahibabad 201 010.

Contact :

Dr. T.K. Bhattacharya,  
Project Manager.

Acronym of Orgn. :

CEL.

Phone Number :

011 - 203557.

Telex Number :

0592 -203 INDIA.

Cable :

CELFERCORE - GAZIABAD INDIA

Type of Or:n. :

Government industry.

Description of Orgn. :

Solar Photovoltaic Project at CEL is a fully sponsored and supported project of Department of Science and Technology, Government of India. CEL is the executing agency. The primary function of CEL is to productionize locally developed technology, in the field of electronic systems and components, for ultimate commercial utilization.

Type of Research :

Applied and developmental and  
Commercialization

Central Electronics Ltd. (Contd.)

Technical Areas of Interest :

Conservation  
Photovoltaics  
Solar - General  
Solar Thermal Energy  
Wind

16. Central Fuel Research Institute,  
Dhanbad 828 108 (Bihar).

Contact :

Mr. S.R. Jagadish,  
Scientist, New Energy (R&D).

Phone Number :

6205 )  
6569 ) Jharia  
6570 )

Cable :

FUEL RESEARCH, DHANBAD.

Type of Orgn. :

National Government.

Description of Orgn. :

The institute was established in 1950 by the CSIR and at present it is under the Ministry of Energy. Within the discipline of coal research the organisation carries out research regarding use of coal and its by-products for new and renewable alternative sources of energy like the solar, hydrogen, plasma, synthetic oils.

Type of Research :

Basic, theoretical and fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Geothermal Power  
Solar - General  
Solar Thermal Energy

Alcohol Fuels  
Peat  
Oil Shale, Tar Sands  
Solar Heating & Cooling  
Hydrogen, Plasma,  
Fuel Cells

17. Central Mechanical Engineering  
Research Institute,  
Mahatma Gandhi Avenue,  
Durgapur 713 209.

Contact :

Mr. Vijay Kalia,  
Scientist - Technical Information &  
Liaison Div.

Acronym of Orgn. :

CMERI.

Phone Number :

2261-62-63.

Telex Number :

0205-213.

Cable :

MECHSEARCH.

Type of Orgn. :

National Government.

Description of Orgn. :

The institute was established in 1958 by the Council of Scientific and Industrial Research. It has also established field stations in Ludhiana, Madras and Pune.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and Developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Ocean Energy (thermal, tidal, wave)  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

18. Central Power Research Institute,  
Bangalore 560 012.

Contact :

Mr. S. Jayaraman,  
Sr. Dy. Director,  
Instrumentation & Energy Studies Div.

Acronym of Or.n. :

C. P. R. I.

Phone Number :

30712 Bangalore.

Type of Or.n. :

National Government.

Description of Orgn. :

CPRI is an autonomous organisation under the Ministry of Energy. The major activity is research, development and testing in the field of electrical power engineering. In recent times, interests have extended to the field of energy too, especially rural energy needs and implements. Presently attempted areas are biomass combustion application, pumps for agricultural water lifting, improved wood burning stoves and wind energy for water lifting.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Geothermal Power  
Ocean Energy (thermal, tidal, wave)  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

- ✓ 19. Central Salt & Marine Chemicals  
Research Institute,  
Waghawadi Road,  
Bhavnagar 364 002.

Contact :

Dr. K.S. Rao,  
~~Acting~~ Director.

Acronym of Orgn. :

CSMCRI.

Affiliated Orgns. :

Marine Algal Research Station, Mandapam Camp (TN).  
Okhamandal Marine Algal Experimental Station, Port Okha  
CSMCRI (SWI) Field Station, Behrampur 5 (Orissa).

Phone Number :

3960, 4496 (O) 6329 (R).

Telex Number :

0162-230.

Cable :

NAMAK BHAVNAGAR.

Type of Orgn. :

National Government.

Description of Orgn. :

This Institute, is one of the national laboratories under Council of Scientific & Industrial Research, and is engaged in research and development work on utilization of solar energy, biomass energy, wind energy, salt and marine chemicals, corrosion, desalination of sea and brackish water, ion-exchange, electro-dialysis, reverse osmosis and ultrafiltration, marine algae and sea weeds chemicals, etc.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental  
Policy Research



**Central Salt & Marine Chemicals  
Research Institute (Contd.)**

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood & Charcoal  
Conservation  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

20. **Central Water & Power Research Station,  
Khadakwasla,  
Pune 411 024.**

**Contact :**

Mr. P. C. Saxena,  
Director.

**Acronym of Orgn. :**

C. W. & P. R. S.

**Phone Number :**

445550-52.

**Telex Number :**

0145-390.

**Cable :**

ANUSANDHAN, PUNE.

**Type of Orgn. :**

National Government.

**Description of Orgn. :**

The Central Water & Power Research Station is premier national institute devoted to basic and applied research in the field of hydraulic and other allied disciplines. This Research Station is also recognised as Regional Laboratory at the United Nations Economic & Social Commission for Asia and the Pacific.

Central Water & Power Research Station (Contd.)

Type of Research :

Basic, Fundamental  
Applied and developmental

Technical Areas of Interest :

Geothermal Power  
Hydropower  
Ocean Energy (thermal, tidal, wave)

21. Centre for Studies in Decentralised Industries,  
Vaikunthbhai Mehta Smarak Trust,  
5th Floor, NKM International House,  
178, Backbay Reclamation,  
Bombay 400 020.

Contact :

Mr. B.T. Acharya,  
Director.

Phone Number :

240373.

Cable :

VAIMEST.

Type of Orgn. :

Private.

Description of Orgn. :

The Centre has been established in 1976 with the objective of undertaking research on the socio-economic problems of rural industries, decentralised development, cooperation and appropriate technology.

Type of Research :

Applied and Developmental  
Policy Research

Technical Areas of Interest :

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Hydropower

**Centre for Studies in Decentralised Industries (Contd.)**

**Technical Areas of Interest :**

Ocean Energy (thermal, tidal, wave)  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

**Type of Information Resource :**

Abstracting and Indexing  
Library

**Types of Information Services :**

Inquiry and Referral/Reference  
Inter-library Loans  
Photoduplication

The Centre monitors all developments in various fields of its interest and acts as a technology clinic.

22. Centre for Water Resources Development  
and Management,  
Water Quality & Environment Div.,  
Kottamparamba P.O.,  
Calicut 673 008.

**Contact :**

Dr. Shahid Abbas Abbasi,  
Head-in-charge.

**Phone Number :**

61176.

**Cable :**

WATRES KUNNAMANGALAM CALICUT.

**Type of Orgn. :**

National Government.

**Description of Orgn. :**

The Centre is an autonomous research organisation established by the Government of Kerala in 1978. The major objectives of CWRDM include (a) to function as centre of excellence for advanced research, training and extension on all aspects of water resource utilisation,

**Centre for Water Resources Development  
and Management (Contd, )**

**Description of Orgn. :**

(b) to act as an advisory and functional institution in the planning and execution of national projects on water use, (c) to act as a storehouse of information on water use, specially in the humid tropics, and (d) to cooperate with and to secure participations of national and international agencies in activities of mutual interest.

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental  
Policy Research  
Extension - Transfer of Technology

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Conservation  
Hydropower  
Solar - General  
Development & Management of Water Resources

23. Centre of Post-Graduate Instruction & Research,  
Panaji,  
Goa.

**Contact :**

Miss Vera De Souza,  
-Student-

**Phone Number :**

2040.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

Centre of Post-Graduate Instruction and Research is directly affiliated to the Bombay University, and is supported by the State Government and U.G.C.

**Type of Research :**

Applied and developmental

**Centre of Post-Graduate Instruction & Research (Contd.)**

**Technical Areas of Interest :**

**Biomass/Bioconversion - General**

- 24. Centre of Science for Villages,  
Kakawadi,  
Wardha 442 001.**

**Contact :**

**—Mr. M.A. Sathianathan, —  
Coordinator, Energy & Environment.**

**Phone Number :**

**2412 WARDHA.**

**Cable :**

**GRAMVIGYAN.**

**Type of Orgn. :**

**It is an association of scientists, social workers and others interested in the transfer of technology to villages concentrating on : (1) Rural, civil and environmental engineering, (2) Village industries. (3) Energy and environment. It is funded for rural technology projects by the Department of Science and Technology, Govt. of India, and by Indian and external private agencies and works through headquarters, field stations and village centres.**

**Type of Research :**

**Applied and developmental  
Policy Research  
Methods & techniques of training to convert  
techniques into trades**

**Type of Information Services :**

**Inquiry and Referral/Reference  
Publishes a monthly journal "SCIENCE FOR THE  
VILLAGES."**

25. College of Engineering,  
Guindy,  
Madras 800 025.

Contact :

Dr. T.R. Jagadeesan,  
Prof. of Heat Power Engg.

Phone Number :

415723 ext. 18.

Type of Orgn. :

Academic.

Description of Orgn. :

An engineering educational institution with a record of over 150 years catering to the technological manpower requirement of the country. The staff and students take part in research and consultancy work on topics of current interest in close collaboration with industries.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

26. Dayanand Brijendra Swaroop  
Post Graduate College,  
Dehra Dun 248 001 (U. P.).

Contact :

Mr. K. Sen,  
Lecturer, Dept. of Physics.

Phone Number :

4757 Dehradun (U. P.).

**Dayanand Brijendra Swaroop**  
**Post Graduate College (Contd.)**

Type of Orgn. :

Academic.

Type of Research :

Theoretical

Technical Areas of Interest :

Photovoltaics

27. Devki R&D Engineers,  
Vasant Kutir,  
R.C. Dutt Road,  
Vadodara.

Contact :

Dr. B.G. Desai.

Phone Number :

67061, 67062.

Telex Number :

0175 - 423.

Type of Orgn. :

Private.

Description of Orgn. :

Devki R&D Engineers is a research and consultancy organisation active in energy and electrical technology since 1975.

Type of Research :

Applied and developmental  
Policy research

Technical Areas of Interest :

Biomass/Bioconversion - General  
Conservation  
Solar - General

Devki R&D Engineers (Contd.)

Type of Information Resource :

A journal entitled "Electricity Conservation Quarterly."

28. Dharms<sup>†</sup> Morarji Chemical Co. Ltd. ,  
Ambernath 421 501.

Contact :

Mr. Navinchandra Govindji Ashar,  
General Manager (Internal Projects &  
Environmental Engg. Div. ).

Affiliated Orgns.:

Borax Morarji Ltd. , Ambernath 421 501 (Maharashtra).  
Albright, Morarji & Pandit Ltd. , Ambernath 421 501  
(Maharashtra).  
Premier Morarji Chemical Co. Ltd. , Karthika, Jagathay,  
Trivandrum 695 014.  
MP Agro Morarji Fertilisers Ltd. , Raisalpur, Tehsil &  
Dist. Hoshangabad, M.P.

Phone Number :

241 - 245 (Ambernath).

Telex Number :

0135 218.

Cable :

CHEMICAL AMBERNATH.

Type of Orgn. :

Private.

Description of Orgn. :

Manufacturer of heavy chemicals and fertilisers.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General	Alcohol Fuels
Conservation	Photovoltaics
Solar - General	Solar Heating & Cooling
Solar Thermal Energy	



29. Engineers India Ltd.,  
Heat & Mass Transfer Div.,  
17, Parliament Street,  
New Delhi 110 001.

Contact :

Mr. R. Bhattacharyya,  
Manager.

Phone Number :

272381.

Telex Number :

031 4773.

Cable :

ENGINDIA.

Type of Orgn. :

National Government.

Description of Orgn. :

Design engineering organisation having process engineering, research and development, heat and mass transfer division, design and engineer refineries, petro-chemicals, fertiliser, non ferrous and ocean engineering plants and industries. The Company have R&D Division to develop technology for utilisation of new source of energy, recovery of waste heat and conservation of energy. The HMTD develops and designs heat and mass transfer units.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Peat  
Conservation  
Oil Shale, Tar Sands  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

30. Govt. College of Engineering & Technology,  
Raipur 492 002.

Contact :

Dr. M. L. Verma,  
Lecturer, Dept. of Mech. Engg.

Phone Number :

23659.

Type of Orgn. :

Academic.

Description of Orgn. :

This institution was established in 1958. It is affiliated to Ravishankar University, Raipur, and is supported by Government of Madhya Pradesh.

Technical Areas of Interest :

Draft Animals  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

31. Government Engineering College,  
Mechanical Engg. Dept.,  
Jabalpur 482 011.

Contact :

R. C. Agrawal,  
Lecturer, Mechanical Engg.

Acronym of Orgn. :

Shaskiya Abhi yantrik Mahavidyalaya.

Phone Number :

21453.

Type of Orgn. :

Academic.

Description of Orgn. :

The College offers graduate and post graduate programmes in Civil, Mechanical, Electrical and Electronics Engineering.

**Government Engineering College (Contd.)**

**Description of Orgn. :**

Also, it has facilities for offering consultancy service to industries.

**Type of Research :**

Applied and developmental

**Technical Areas of Interest :**

Hydropower

Solar - General

Solar Heating and Cooling

Solar Thermal Energy

Wind

Alternative Fuels for internal combustion engines

32. Government of India,  
Dept. of Science & Technology,  
Information & Documentation Div.,  
New Mehrauli Road,  
New Delhi 110 029.

**Affiliated Orgns. :**

Council of Scientific & Industrial Research

Survey of India

National Atlas & Thematic Mapping Organization

National Museum of Natural History

**Phone Number :**

666073 and 662260/201.

**Cable :**

SCIENTECH, DELHI.

**Contact :**

Mr. R. Thiagarajan,  
Director (Information & Documentation).

**Description of Orgn. :**

The Ministry of Science & Technology of Government of India, plans, coordinates, and funds science and technology activities in the country, mainly research and development.

**Department of Science & Technology (Contd.)**

**Type of Research :**

Policy research

**Technical Areas of Interest :**

Biomass/Bioconversion - General

Alcohol Fuels

Fuel Wood and Charcoal

Peat

Geothermal Power

Ocean Energy

Photovoltaics

Solar - General

Solar Heating and Cooling

Solar Thermal Energy

Wind

**Type of Information Resource :**

Document Dissemination/Clearing house  
Library

National Information Centre for Science  
and Technology (NISSAT)

DST coordinates information storage and  
retrieval for all areas of science and technology.

**Types of Information Services Offered :**

Inquiry and Referral/Reference

Inter-Library Loans

Photoduplication

33. Gujarat Energy Development Agency,  
3rd floor, B. N. Chambers,  
R. C. Dutt Road,  
Vadodara 390 005.

**Contact :**

~~Shri N. A. Shah,~~  
~~Officer on Special Duty.~~

**Type of Orgn. :**

Semi Governmental

Gujarat Energy Development Agency (Contd.)

Description of Orgn. :

Gujarat Energy Development Agency (GEDA) is a registered society set up by the Government of Gujarat in the year 1979 to promote research and development in the field of renewable sources of energy.

Type of Information Services :

The Agency is in the midst of setting up an energy documentation centre.

34. Gujral & Sons,  
16-L, Model Town,  
Rohtak 124 001.

Contact :

Mr. B.R. Gujral.

Phone Number :

2408 Rohtak.

Cable :

GUJRAL 16-L MODEL TOWN, ROHTAK.

Type of Orgn. :

Private.

Type of Research :

Applied

Technical Areas of Interest :

Bioconversion - General

Conservation

Photovoltaics

Solar - General

Solar Heating and Cooling

Types of Information Services :

Inquiry/Reference

Provides expert technical know-how on gobar gas plants, solar cooker and water heaters, etc.

35. Hindustan Brown Boveri Ltd.,  
R&D Centre,  
Baroda 390 001.

Contact :

Dr. M. Ramamoorthy,  
Divisional Manager & Chief of R&D.

Phone Number :

4141 (5 lines).

Telex Number :

HBB 212 & 283, BARODA.

Cable :

HIND BOVERI.

Type of Orgn. :

Non-Governmental.

Description of Orgn. :

HBB has three manufacturing units at Baroda, Bombay and Faridabad making power equipment like switchgear, instrument transformers, furnaces, relays, motors and communication equipment.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Solar Heating and Cooling  
Solar Thermal Energy

36. Hydrogen Energy Task Force,  
Madras 600 085.

Contact :

Prof. Dr. M.V.C. Sastri,  
Chairman.

Phone Number :

MADRAS 414292.

Type of Orgn. :

National Government.

## Hydrogen Energy Task Force (Contd.)

### Description of Orgn. :

Main activities of the organisation are information-dissemination, preparation of status reports, surveys on hydrogen energy development, systems-analysis, comparative economics and cost-benefit studies on hydrogen and other alternative fuels technology and management aspects, project evaluation and promotion.

### Technical Areas of Interest :

Ocean Energy (thermal, tidal, wave)  
Photovoltaics  
Solar - General  
Hydrogen Energy

37. Indian Agricultural Research Institute,  
~~Engineering Div.,~~  
New Delhi 110 012.

### Contact :

Mr. S. K. Tandon,  
~~Asst. Engineer (R&D).~~

### Affiliated Orgns. :

Regional Station, Rajindernagar, Hyderabad.  
Regional Station, G. T. Road, Kanpur Univ., Kanpur.  
Regional Station, Pusa, Dist. Samastipur (Bihar).  
Regional Station, Flowerdale, Simla 4 (H. P.).  
Regional Station, Bhowali Dist., Nainital (U. P.).  
Regional Station, Karnal (Haryana).  
Regional Station, Wellington (Nilgiris).  
Regional Station, Port Blair (Andaman).

### Phone Number :

587475.

### Cable :

KRISHI PUSA.

### Type of Orgn. :

Academic.

### Description of Orgn. :

Indian Agricultural Research Institute is India's premier institution in the field of agricultural research (including) agricultural engineering, post graduate programme and extension education.

**Indian Agricultural Research Institute (Contd.)**

Description of Orgn. :

It awards Doctor of Philosophy in agricultural sciences and its related disciplines including agricultural engineering. It has eighteen divisions and two interdisciplinary research centres and sixteen regional stations all over India.

Type of Research :

Basic

Applied and developmental

Technical Areas of Interest :

Draft Animals

Photovoltaics

Solar - General

Solar Heating and Cooling .

38. Indian Copper Information Centre,  
27 B, Camac Street,  
Calcutta 700 016.

Contact :

Dr. L.R. Vaidyanath,  
Director.

Phone Number :

445724/25.

Telex Number :

021 7786.

Cable :

CUINFORM.

Type of Orgn. :

Private.

Description of Orgn. :

Registered Society providing technical information and advisory services on proper and efficient uses of copper and its alloys, organising research and development work.



**Indian Copper Information Centre (Contd.)**

**Technical Areas of Interest :**

Solar Heating and Cooling  
Solar Thermal Energy

**39. Indian Institute of Management,  
Vastrapur,  
Ahmedabad 380 015.**

**Contact :**

Dr. T.K. Moulk,  
Professor.

**Phone Number :**

450041.

**Acronym of Orgn. :**

IIMA.

**Telex Number :**

012-351.

**Cable :**

INDINMAN.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

Its functions are to conduct teaching in post graduate business management, management research, management training, national and international consultancy and is funded by national government, international agencies and Indian industries.

**Type of Research :**

Applied and developmental  
Policy Research

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Draft Animals  
Hydropower  
Solar - General  
Wind

Alcohol Fuels  
Conservation  
Geothermal Power  
Photovoltaics  
Solar Heating & Cooling

40. Indian Institute of Science,  
Dept. of Aeronautical/Engg.,  
Bangalore 560 012.

Contact :

Dr. S.P. Govindaraju,  
Associate Prof.

Phone Number :

34411 ext. 421.

Cable :

SCIENCE BANGALORE 12.

Type of Orgn. :

Academic.

Description of Orgn. :

The Institute was established in 1909 as a centre for higher education in science and engineering. At present, it is also one of the leading research centres in the country.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Hydropower  
Solar Heating and Cooling  
Wind

41. Indian Institute of Science,  
Centre for the Application of Science  
and Technology to Rural Areas,  
Bangalore 560 012.

Contact :

Dr. A.K.N. Reddy,  
Convenor.

Acronym of Orgn. :

ASTRA.

Indian Institute of Science (Contd.)

Phone Number :

34411 ext. 447.

Telex Number :

043-326.

Cable :

SCIENCE.

Type of Or:n. :

Academic.

Description of Or:n. :

It was formally created in August 1974 as a voluntary group to initiate, catalyse, sustain and grow in the work of relevance to rural development and for the generation of technologies appropriate for rural development, and the promotion of the sciences underlying these technologies. ASTRA projects are in the areas of energy, building, water agro-processing, resources, transport.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Draft Animals  
Solar - General  
Solar Heating and Cooling  
Wind  
Low Cost Housing &  
Agricultural Ecosystem

42. Indian Institute of Technology,  
Powai,  
Bombay 400 076.

Contact :

Dr. Bedford,  
Director.

Phone Number :

581421.

**Indian Institute of Technology (Contd.)**

**Telex Number :**

011-2385.

**Cable :**

TECHNOLOGY BOMBAY 76.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

The Institute is one of the five technological universities established in 1958.

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental  
Technology Transfer  
Feasibility Reports

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Alcohol Fuels  
Conservation  
Geothermal Power  
Hydropower  
Ocean Energy (thermal, tidal, wave)  
Oil Shale, Tar Sands  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind  
Energy Conservation  
Energy Conversion

43. Indian Institute of Technology,  
Dept. of Mechanical Engg.,  
Powai,  
Bombay 400 076.

**Contact :**

Dr. B.S. Jagadish,  
Professor.

**Indian Institute of Technology (Contd.)**

Phone Number :

581421.

Telex Number :

011-2385.

Cable :

TECHNOLOGY, IIT POWAI, BOMBAY 400 076.

Type of Orgn. :

Academic.

Type of Research :

Basic, Theoretical and Fundamental

Applied and developmental

Technical Areas of Interest:

Biomass/Bioconversion - General

Alcohol Fuels

Fuel Wood and Charcoal

Conservation

Solar - General

Solar Heating and Cooling

Solar Thermal Energy

Wind

44. Indian Institute of Technology,  
Central Library,  
Kharagpur 721 302.

Contact :

The Librarian.

Phone Number :

Kharagpur 221-224 (4 lines).

Telex Number :

CA. 021-2760.

Cable :

TECHNOLOGY, KHARAGPUR.

Type of Orgn. :

Academic.

**Indian Institute of Technology (Contd.)**

**Technical Areas of Interest :**

Conservation  
Hydropower  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

**45. Indian Institute of Technology,  
Madras 600 036.**

**Contact :**

Prof. Indiresan,  
Director.

**Phone Number :**

415342 ext.200(Office) 273(Residence).

**Telex Number :**

(041) 7362.

**Cable :**

TECHNOLOGY MADRAS.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

This is one of the five higher technological institutions in India established with German collaboration in 1959. It offers Bachelors, Masters and Ph.D. degree programmes in science and technology. It conducts research in basic and applied science and also provides consultancy service to industry.

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental

**Technical Areas of Interest :**

Biomass/Bioconversion - General	Alcohol Fuels
Fuel Wood and Charcoal	Conservation
Hydropower	Ocean energy
Photovoltaics	Solar - General
Solar Heating and Cooling	Solar Thermal Energy
Wind	Rural Development

46. Indian Institute of Technology,  
Fluid Mechanics Laboratory,  
Dept. of Applied Mechanics,  
Madras 600 036.

Contact :

Dr. B.H.L. Gowda,  
Asst. Prof.

Phone Number :

415342 ext. 259.

Telex Number :

TECHMAS - MS 7362.

Type of Or:n. :

Academic.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Wind

47. Indian Institute of Technology,  
Madras 600 036.

Contact :

Dr. B. Viswanathan,  
Asst. Prof., Dept. of Chemistry.

Affiliated Or:n. :

Dept. of Chemistry,  
Indian Institute of Technology,  
Madras.

Phone Number :

Madras 415515.

Telex Number :

TECHMAS 041-7362.

Type of Orgn. :

Academic.

**Indian Institute of Technology (Contd.)**

**Type of Research :**

**Basic, Theoretical and Fundamental**

**Technical Areas of Interest :**

**Biomass/Bioconversion - General**

**Alcohol Fuels**

**Photovoltaics**

**Solar - General**

**Hydrogen Energy**

- 48. Indian Institute of Technology,  
Dept. of Mechanical Engg.,  
Refrigeration & Airconditioning Lab.,  
Madras 600 036.**

**Contact :**

**Dr. M. V. Krishnamurthy,  
Prof. & Head.**

**Phone Number :**

**415342 - 251.**

**Telex Number :**

**TECHMAS - MS (041) 7362.**

**Cable :**

**TECHNOLOGY MADRAS.**

**Type of Or:n. :**

**Academic.**

**Type of Research :**

**Applied and developmental  
Industrial Consultancy**

**Technical Areas of Interest :**

**Solar Heating and Cooling**

**Solar Thermal Energy**

**Food Processing and Transport**

**Cryogenic Engineering**

**Heat and Mass Transfer**



49. Indian Institute of Technology,  
Energy Research Centre,  
Madras 600 036.

Contact :

Dr. M. C. Gupta, :  
Prof. of Mechanical Engg. &  
Head, Energy Research Centre.

Phone Number :

415342 ext. 235(Office) 214(Residence).

Telex Number :

(041) 7362.

Cable :

TECHNOLOGY MADRAS.

Type of Orgn. :

Academic.

Description of Orgn. :

The energy research centre has three divisions :  
solar energy, wind power and electrical energy.  
The solar energy division is engaged in research  
and development of solar-thermal devices. The wind  
power division is engaged in researching vertical axis  
windmills and the aerodynamic performance of blades.  
The electrical energy division is engaged in conducting  
detailed and systematic studies on the power systems of  
the region. It offers Masters and Ph.D. degree programmes  
in energy research.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind  
Optimisation of electrical systems

- ✓ 50. (Indian Institute of Technology,  
Centre of Energy Studies,  
New Delhi 110 016.

Contact :

Dr. S. S. Mathur,  
Prof. & Head.

Phone Number :

654054.

Telex Number :

3687.

Cable :

TECHNOLOGY DEL HI.

Type of Orgn. :

Academic.

Description of Orgn. :

The Institute is one of the five technological universities  
in India.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General

Alcohol Fuels

Fuel Wood and Charcoal

Peat

Conservation

Photovoltaics

Solar - General

Solar Heating and Cooling

Solar Thermal Energy

Teaching of All Areas of Energy (including

Geothermal, Hydropower, Ocean, Oil, Wind, etc.)

Nuclear Fusion

MHD

51. Indian Institute of Technology,  
Dept. of Chemistry,  
Hauz Khas,  
New Delhi 110 016.

Contact :

Dr. A.S.N. Murthy,  
Asst. Prof.

Phone Number :

653576.

Cable :

CHEMISTRY TECHNOLOGY NEW DELHI.

Type of Orgn. :

Academic.

Technical Areas of Interest :

Solid-liquid junction solar cells  
Photogalvanic cells

52. Indian Institute of Tropical  
Meteorology (I. I. T. M. ),  
Solar Radiation Data Handbook Project,  
Field Unit,  
239-A, Rajmahal Vilas Extension,  
Bangalore 560 080.

Contact :

Dr. (Miss) A. Mani,  
Scientist-in-charge.

Affiliated Orgn. :

Indian Institute of Tropical Meteorology, Pune.

Phone Number :

33320.

Type of Orgn. :

National Government.

**Indian Institute of Tropical  
Meteorology (I.I.T.M.) (Contd.)**

**Description of Orgn. :**

The Solar Radiation Data Handbook Project of the Institute, financed by Government of India has as its objective the preparation and publication of a Solar Energy Data Handbook for India.

**Type of Research :**

Applied and developmental

**Technical Areas of Interest :**

Solar - General

Wind

53. Institute of Armament Technology,  
Electrical Engg. Dept.,  
Girinagar,  
Pune 411 025.

**Contact :**

Prof. Om Parkash,  
Head.

**Phone Number :**

Poona, 440050/246.

**Cable :**

ARMINST (E).

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

Research and teaching organisation of Ministry of Defence, Government of India.

**Type of Research :**

Applied and developmental

**Technical Areas of Interest :**

Wind

54. International Crop Research Institute  
for Semi Arid Tropics,  
Andhra Pradesh 802 324.

Contact :

Dr. O.P. Singhal,  
Agricultural Engineer.

Acronym of Orgn. :

ICRISAT.

Phone Number :

224016.

Type of Orgn. :

International.

Description of Orgn. :

ICRISAT is among the earliest of the IARC to give formal recognition in its mandate of the need to supplement research on individual crops with research to integrate various components of the farm into production, stable, and socio-economically viable farming systems in the semi-arid tropics.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and Developmental  
Policy Research

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Draft Animals  
Solar - General  
Solar Heating and Cooling  
Wind

55. Jawaharlal Nehru Krishi Vishwa Vidyalaya,  
Krishinagar,  
Jabalpur 482 004 (M. P.).

Contact :

Dr. J.H. Agarwal,  
Director, Instrumentation.

**Jawaharlal Nehru Krishi Vishwa Vidyalaya (Contd.)**

Affiliated Orgn. :

Instrumentation Center,  
Dept. of Agricultural Botany.

Phone Number :

23771 ext. 14.

Type of Orgn. :

Academic.

Description of Orgn. :

It is a government supported university involved in teaching, research and extension activities in the areas of agriculture, agricultural engineering, veterinary.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Solar - General  
Solar Instrumentation  
Solar Agricultural Applications

56. Jawaharlal Nehru University,  
School of Environmental Sciences,  
New Mehrauli Road,  
New Delhi 110 067.

Contact :

Dr. Girish Chandra Pandey,  
Asst. Prof.

Phone Number :

652438.

Cable :

JAYENU NEW DELHI.

Type of Orgn. :

Academic.

**Jawaharlal Nehru University (Contd.)**

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental  
Policy Research (e.g., economic, socio-cultural  
evaluation and analysis)

Technical Areas of Interest :

Biomass/Bioconversion - General  
Geothermal Power  
Photovoltaics  
Solar Thermal Energy

57. Jyoti Ltd.,  
Energy Div.,  
Tandalja,  
Baroda 391 410.

Contact :

Dr. B.C. Jain,  
Manager.

Affiliated Orgn. :

Jyoti Solar Energy Institute

Phone Number :

66414-417.

Telex Number :

0175-214.

Cable :

JYOTIPUMPS.

Type of Orgn. :

Private.

Description of Orgn. :

Complex set up with the objective of development of technologies for effective utilisation of renewable sources of energy and for more efficient use of conventional sources. It has more than 35 technical persons. Facilities include engine laboratory, accelerated environmental chamber, mini computer fabrication and machine shop processing, and for windmill testing.

**Jyoti Ltd. (Contd.)**

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Conservation  
Hydropower  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind  
Prime movers and engines

- ✓ 58. Jyoti Solar Energy Institute,  
Post Box No. 20,  
P.O. Vallabh Vidyanagar 388 120 (Gujarat).

Contact :

Dr. Ravindranath M. Dave,  
Hon. Director.

Phone Number :

7004.

Type of Orgn. :

Private.

Description of Orgn. :

The Institute, attached to Birla Vishvakarma Mahavidyalaya (Engineering College) was founded in January 1979, aiming to provide laboratory facilities for teaching and research, carry out field survey/trials of solar equipment developed, etc. It is funded by private industry, public trust and the Department of Science and Technology.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and Developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Photovoltaics  
Solar Heating and Cooling  
Wind

Fuel Wood and Charcoal  
Solar - General  
Solar Thermal Energy



59. Kelvinator of India Ltd.,  
158, Sector 15,  
Faridabad (Haryana).

Contact :

Prof. A.K. Mehta,  
R&D Manager.

Phone Number :

81-2381; 81-2013.

Telex Number :

343 220 KIND IN.

Cable :

KELIEON, FARIDABAD.

Type of Orgn. :

Private.

Description of Orgn. :

Manufacturers of refrigerators, deep freezers,  
chest freezers, hermetic compressors, laminations  
for electric motors, tools and dies, cash registers,  
molecular sieve driers.

Type of Research :

Policy Research

Technical Areas of Interest :

Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

60. Madurai Kamaraj University,  
Dept. of Plant Sciences,  
School of Biological Sciences,  
Madurai 625 021.

Phone Number :

33171 ext. 21.

Cable :

UNIVERSITY MADURAI.

Madurai Kamaraj University (Contd.)

Contact :

Prof. A. Gnanam,  
Prof. of Plant Physiology.

Type of Orgn. :

Academic.

Description of Orgn. :

A State University. Essentially research function with minor commitment on teaching.

Type of Research :

Basic/Theoretical  
Applied/Developmental

Technical Areas of Interest :

Biomass/Bioconversion  
Fuel Wood and Charcoal

61. Mahatma Gandhi Memorial College,  
Udupi 576 102.

Contact :

Dr. Ashok Kundapur,  
Principal Investigator.

Phone Number :

8359.

Type of Orgn. :

Academic.

Description of Orgn. :

MGM College is an aided College under the sponsorship of Academy of General Education, Manipal.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Conservation	Draft Animals
Solar - General	Solar Heating and Cooling
Solar Thermal Energy	Ecological Conservation
Growing Trees	

62. Meerut University,  
Institute of Advanced Studies,  
Dept. of Physics,  
Meerut 250 007.

Contact :

Dr. T.P. Sharma,  
Reader.

Type of Or.n. :

Academic.

Description of Or.n. :

This Department was started in 1969 to impart post graduate education and to provide facilities for doctoral research.

Type of Research :

Basic, Theoretical and Fundamental

Technical Areas of Interest :

Photovoltaics  
Solar - General  
Solar Thermal Energy  
Thin Film Solar Cells  
Solar Stills  
Solar Pump

63. Monitoring Organization,  
Monitoring Station,  
Suraj Kund Colony,  
Gorakhpur.

Contact :

Mr. Ashok Chandra,  
Engineer & Officer-in-charge.

Acronym of Orgn. :

MONTORG.

Affiliated Orgn. :

Wireless Planning & Coordination Wing.

Phone Number :

3849.

Monitoring Organization (Contd.)

Cable :

MONITORING STATION.

Type of Orgn. :

National Government.

Description of Orgn. :

The organization does the spectrum planning and management.

Technical Areas of Interest :

Solar Thermal Energy

64. National Chemical Laboratory,  
Div. of Technical Services,  
National Chemical Lab.,  
Pune 411 009.

Contacts :

Dr. S.H. Iqbal,  
Head, Div. of Technical Services.  
Dr. A.P. Sinha,  
Head, Phy. Chem. Div.

Phone Number :

56452, 53.

Telex Number :

0145-266.

Cable :

CHEMISTRY, PUNE.

Type of Orgn. :

National Government.

Description of Orgn. :

The National Chemical Laboratory, Pune, is a constituent laboratory under the Council of Scientific and Industrial Research, New Delhi. It is funded by the Government of India, but it enjoys autonomy in regard to its research planning and implementation. The objective of this laboratory is to carry out basic and applied research in chemistry and related areas for the advancement of Indian industry and technology. The laboratory also takes up

**National Chemical Laboratory (Contd.)**

**Description of Orgn. :**

research sponsored by industry or any other funding agency, in which case the funds come from the sponsors, which in turn, give them rights to the results.

**Type of Research :**

Applied and developmental

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Alcohol Fuels  
Photovoltaics  
Solar Heating and Cooling  
Solar Thermal Energy

65. National Environmental Engg. Research Institute,  
~~Solid Wastes Division,~~  
Nagpur 440 020.

**Contact :**

Dr. Anand Dattatraya Bhide,  
Asst. Director & Head of Solid  
Wastes Div.

**Acronym of Orgn. :**

NEERI.

**Phone Number :**

26071.

**Telex Number :**

233.

**Cable :**

NEERI, NAGPUR.

**Type of Orgn. :**

National Government.

**Description of Orgn. :**

Research, development, development and consultation activities in environmental engineering field. Major areas - water supply and treatment, waste water treatment, disposal and utilisation, air pollution control, solid waste management, rural water supply and sanitation.

**National Environmental Engg. Res. Inst. (Contd.)**

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Conservation

66. National Dairy Research Institute,  
Southern Regional Station,  
Adugodi,  
Bangalore 560 003.

Contact :

Mr. M.S. Venkata Ramaiah,  
Estate Officer, Engineer.

Phone Number :

579661 (4 lines) .... 1 to 4.

Cable :

DAIRY SEARCH.

Type of Orgn. :

Academic.

Description of Orgn. :

The Institute with its headquarters at Karnal (Haryana State) is a premier research institute under the Indian Council of Agricultural Research. This was established in the year 1923 at Bangalore. Its main activities are imparting training in Dairying and Dairying Engineering. The Institute has two more regional stations in addition to the Bangalore Station at Bombay and Kalyani (W.B.). Provision for research work for Ph.D. is also available.

Type of Research :

Applied and developmental  
Research in Dairy Sciences

Technical Areas of Interest :

Biomass/Bioconversion - General  
Draft Animals  
Solar - General

67. National Industrial Development Corporation,  
Technological Services,  
Vinay Marg,  
Chanakyapuri,  
New Delhi 110 021.

Contact :

Dr. Subhash Chander Bose,  
Specialist.

Phone Number :

670153-54-55.

Telex Number :

031-2871.

Cable :

NIDCORPN.

Type of Orgn. :

National Government.

Description of Orgn. :

It is a government of India undertaking under Ministry of Industries and is autonomous. One of the objectives of the company is development of know-how for commercial exploitation.

Type of Research :

Applied and developmental with the object of commercial exploitation.

68. National Physical Laboratory,  
Hillside Road,  
New Delhi 110 012.

Contact :

Dr. V. G. Bhide,  
Scientist (Director).

Name of the Orgn. in original language :

Rashtriya Bhoutik Prayogshala.

Phone Number :

582721.

**National Physical Laboratory (Contd.)**

**Telex Number :**

3726.

**Cable :**

NATPHYLAB.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

This organisation was founded in 1949, under Council of Scientific & Industrial Research. Keeping various National Standards' such as length, mass, time, etc., has been a statutory obligation of this organisation since its inception. The laboratory is helping the industries, particularly in the Northern region, by maintaining test facilities such as electron microscopy, X-ray analysis, chemical analysis, spectroscopic and ultrasonic testing etc. Basic research in low temperature, tonosphere, material sciences, chemistry, infra red spectroscopy, Mossbauer spectroscopy and liquid crystals, is being carried out at forefronts. Applied research in solar energy, high pressure technology, vacuum technology, carbon technology is being pursued actively.

**Type of Research :**

Basics, Theoretical and Fundamental  
Applied and developmental

**Technical Areas of Interest :**

Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

69. National Productivity Council,  
9, Syed Amir Ali Avenue,  
Calcutta 700 017.

**Contact :**

Mr. Susil Chandra Gangopadhyay,  
Director (Fuel Efficiency).

**Phone Number :**

446069.



**National Productivity Council (Contd.)**

**Telex Number :**

7742 RDCA IN.

**Cable :**

PRODREG.

**Type of Orgn. :**

National Government.

**Description of Orgn. :**

To stimulate productivity consciousness in the country and to provide productivity services with a view to maximising utilisation of available resources of men materials machines power. NPC collects and disseminates information about concepts and techniques of productivity and management through publications and audio visual media. It organises and conducts seminars, training programmes for various levels of management. NPC offers consultancy service to help industry, adopts techniques for better management and operational efficiency.

**Type of Information Resource :**

Productivity studies and demonstration services.

70. National Productivity Council,  
Lodi Road, *Productivity Estate*  
New Delhi 110 003.

**Contact :**

Mr. V. M. Raghuraman,  
Director (Fuel Efficiency).

**Affiliated Orgn. :**

Petroleum Conservation Research Association.

**Phone Number :**

619102.

**Cable :**

PPRDUCTIVITY.

**Type of Orgn. :**

National Government.

**National Productivity Council (Contd.)**

Description of Orgn. :

Provides industrial training, consultancy and carries out applied research projects. Disseminates information through workshops, seminars, publications. It publishes the quarterly journal of Energy Management.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Conservation

71. National Sugar Institute,  
Kanpur 208 017.

Contacts :

- 1) The Director.
- 2) Dr. Pramod Kumar Agarwal,  
Jr. Scientific Officer, Biochemistry.

Phone Number :

43016.

Cable :

SHARAKARASANSTHA.

Type of Orgn. :

National Government.

Description of Orgn. :

An institute of national standing under the Dept. of Food of the Union Ministry of Irrigation and Agriculture. The institute has academic programmes and offers consultancy services. An advisory cell is located in Pune.

Type of Research :

Basic/Theoretical/Fundamental  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels

72. North Eastern Railway,  
Engineering Department,  
Office of the General Manager,  
Gorakhpur 273 001.

Contact :

Mr. Y. P. Anand,  
Chief Engineer.

Affiliated Orgn. :

Field Units under N.E. Rly.

Phone Number :

2700 (Rly); 3195 (P and T).

Cable :

UPUENGI, GORAKHPUR.

Description of Orgn. :

N.E. Rly. Gorakhpur is a Zonal Unit under  
Indian Railways.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Solar - General

73. PSG College of Technology,  
Coimbatore 641 004.

Contact :

Dr. R. Subbayyan,  
Principal.

Affiliated Orgn. :

PSG Industrial Institute,  
Coimbatore 641 004.

Phone Number :

24177.

Type of Orgn. :

Academic.

PSG College of Technology (Contd.)

Description of Orgn. :

This college imparts education upto post graduate level in six branches of engineering and management. Some research schemes are supported by CSIR, Ministry of Defence, Department of Science and Technology and Atomic Energy Commission.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - general  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

74. PSG College of Technology,  
Mechanical Engg. Dept.,  
Coimbatore 641 004.

Contact :

Dr. C.P. Kothandaraman,  
Prof. of Mechanical Engg.

Affiliated Orgn. :

PSG Industrial Institute,  
Coimbatore 641 004.

Phone Number :

24177.

Telex :

PSGCB/0855/261.

Type of Orgn. :

Academic.

Type of Research :

Applied and developmental

PSG College of Technology (Contd.)

Technical Areas of Interest :

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Conservation  
Solar - General  
Solar Heating and Cooling  
Wind

75. Punjab Agricultural University,  
College of Agricultural Engg.,  
~~Mechanical Engg. Dept.,~~  
Ludhiana 141 004.

Contact :

Dr. K.D. Mannan,  
Prof. of Mechanical Engg.

Affiliated Orgns. :

C.O.A.E. College of Agricultural Engg.  
C.O.A. College of Agriculture  
C.O.V.M. College of Veterinary Medicine  
C.O.B.S. College of Basic Sciences  
C.O.H.S. College of Home Science

Cable :

AGRIVARSITY.

Type of Orgn. :

Academic.

Description of Orgn. :

PAU, Ludhiana, is responsible for teaching, research and extension education in agriculture and allied fields for the Punjab State. The university has five constituent colleges to impart education; to do research and to do extension work in agriculture and allied fields. The university is mainly financed by the Punjab State Government and Indian Council of Agricultural Research.

Type of Research :

Basic, Theoretical and Fundamental  
Mostly Applied and developmental

**Punjab Agricultural University (Contd.)**

**Technical Areas of Interest :**

Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

**76. Regional Engineering College,  
Warangal 506 004 (A. P.).**

**Contact :**

Prof. T.L. Sitharama Rao,  
Prof. of Mechanical Engg.

**Affiliated Orgn. :**

Kakatiya University.

**Phone Number :**

Warangal 7282.

**Cable :**

RENGOL WARANGAL INDIA.

**Type of Or .n. :**

Academic.

**Description of Orgn. :**

The college was established in 1959, as a joint enterprise of the Government of India and the Government of Andhra Pradesh. Both these agencies finance the college.

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Solar - General  
Alcohol Fuels  
Solar Heating and Cooling  
Solar Thermal Energy  
Hydrogen Engine  
Alcohol Engine

77. Regional Research Laboratory,  
Jammu 180 001.

Contact :

Mr. A.K. Bhatia,  
Chairman, Food Technology Div.

Affiliated Or .n. :

Branch Laboratory Sanatnagar,  
Srinagar 190 005.

Phone Number :

46711, 45450, 46480.

Cable :

REGLAB.

Type of Orgn. :

National Government.

Description of Orgn. :

It is one of the national laboratories under Council of  
Scientific and Industrial Research.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Solar Heating and Cooling

78. Regional Research Laboratory,  
Trivandrum 695 019.

Contact :

Dr. P.K. Rohatgi,  
Director.

Acronym of Orgn. :

R.R.L.

Phone Number :

4110.

Telex Number :

0884-232.

**Regional Research Laboratory (Contd.)**

**Cable :**

CONSEARCH, TRIVANDRUM.

**Type of Orgn. :**

National Government.

**Description of Orgn. :**

This is the latest national laboratory established by the Council of Scientific and Industrial Research. It is interdisciplinary regional need-cum-resource based and promotes research and development activities to satisfy regional needs in food spices, materials and energy sectors.

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental  
Policy Research

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Ocean Energy (thermal, tidal, wave)  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy

79. Shri A. M. M. Murugappa Chettiar  
Research Centre,  
Photosynthesis & Energy Div.,  
Tharamani,  
Madras 600 042.

**Contact :**

Dr. C. V. Seshadri,  
Director.

**Acronym of Orgn. :**

MCRC.

**Phone Number :**

411937.



Shri A. M. M. Murugappa Chettiar  
Research Centre (Contd.)

Telex Number :

MCRC CARE TUBEIND 041 301.

Cable :

WELDABLE MADRAS 600 001.

Type of Orgn. :

Private.

Description of Orgn. :

MCRC is funded by private enterprises associated with the late Shri A. M. M. Murugappa Chettiar. Its focus is on research in the areas of food, feed and energy for landless labour, landless artisans and marginal farmers of India. The centre develops low cost technologies that can be locally fabricated by village artisans using mostly locally available resources.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Solar - General  
Solar Heating and Cooling  
Wind  
Windmills, Energy Forestry, Biogas  
Biodynamic Agriculture  
Mass Culture of Spirulina Algae

80. C. C. Shroff Research Institute,  
Excel Estate,  
S.V. Road,  
Goregaon (W),  
Bombay 400 062.

Contact :

Dr. Sudhir D. Ghatnekar,  
Head, Environmental Sciences Div.

C. C. Shroff Research Institute (Contd.)

Affiliated Orgn. :

Transpeck Industries Ltd., Vadodara.

Phone Number :

683442/571431.

Telex Number :

EXCEL 3307.

Cable :

EXCEL JOGESHWARI.

Type of Orgn. :

Private.

Description of Orgn. :

A private research institute founded by Excel Industries Ltd. and allied industries of Excel. The Institute is well equipped with instruments for analytical work and is recognised by Department of Science and Technology and University of Bombay. Institute has a branch in Bhavnagar.

Type of Research :

Applied and developmental  
Educational, Environmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Solar - General  
Wind  
Aquaculture, Pig Breeding

81. R. P. Shroff Associates,  
17, Bencover Mansion,  
8, Wadia Street,  
Tardeo,  
Bombay 400 034.

Contact :

Mr. R. P. Shroff,  
Director.

**R. P. Shroff Associates (Contd.)**

Phone Number :

377255.

Type of Orgn. :

Private.

Description of Orgn. :

It is an unaided, self-supporting consulting organisation, propagating utilisation of alternate energy sources.

Type of Research :

Developmental  
Theoretical

Technical Areas of Interest :

Solar Heating and Cooling  
Solar Thermal Energy  
Wind  
Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Conservation

82. The Social Work & Research Centre (SWRC),  
Tilonia 305 816,  
Madanganj,  
Rajasthan.

Contact :

Mr. Sanjit Roy,  
Director.

Affiliated Orgns. :

SWRC Jagajitnagar, 173 203 H. P.  
SWRC Khorl 123 101 Rewari Haryana.  
SWRC Ghantali Via Khamera Banswara Raj.  
SWRC Jawaja 305 922, Beawar Rajasthan.  
SWRC Chaupal 171 211 Simla H. P.  
SWRC Mada, Dungarpur Rajasthan.  
SWRC Nani Sarsan P.O. Moti Sarsan 389 230 Gujarat.

Phone Number :

Madanganj 316 (Kishengarh) Rajasthan.

**The Social Work & Research Centre  
(SWRC) (Contd.)**

Type of Orgn. :

Private.

Description of Orgn. :

A rural village based integrated rural development centre with autonomous units in other villages in different states of India.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Wind

83. Tata Energy Research Institute,  
Documentation Centre,  
Bombay House,  
24, Homi Mody Street,  
Bombay 400 023.

Contact :

Mr. N.K. Gopalakrishnan,  
Documentation Officer.

Phone Number :

245070 ext. 15.

Telex Number :

011-2618 (TAT IND).

Cable :

CARE 'TATAKEM' BOMBAY.

Type of Orgn. :

Private.

**Tata Energy Research Institute (Contd.)**

**Description of Org.n. :**

The Documentation Centre is a national facility for information and documentation on new and renewable sources of energy.

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Geothermal Power  
Ocean Energy (thermal, tidal, wave)  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind  
Biogas Technology  
Cooking Stoves

**Type of Information Resource :**

Document Dissemination/Clearing house  
Library

**Types of Information Services :**

Inquiry and Referral/Reference  
Photoduplication

A reference library with a total collection of over 30,000 documents and 250 current periodicals. The services are available free of charge. Some of the recent publications are listed :

1. Energy Alerts - bibliographical awareness service 1981.
2. Energy Digest - monthly news service 1981.
3. Indian Energy Abstracts 1980.
4. Indian Solar Energy Resource Index 1975-79.
5. Indian Biogas Resource Index 1980.
6. Biogas Programmes Directory 1980.
7. Solar Passive Systems for Buildings 2nd edn. 1980.
8. Wind Energy Programmes Directory Jan. 1981.
9. Directory of Indian Energy Contacts 1980.
10. Solar Energy Research Projects in India 1978.
11. Renewable Energy Research in India 1980.
12. Solid Fuel Cooking Stoves 1980.

84. Tata Energy Research Institute,  
Field Research Unit,  
Care Sri Aurobindo Ashram,  
Pondicherry 605 002.

Contact :

Dr. C.L. Gupta,  
Hon. Director.

Phone Number :

3483.

Cable :

AUROBINDO.

Type of Orgn. :

Private.

Description of Orgn. :

Doing research mainly in solar energy and monitoring work in wind, biogas, biomass to ensure capability for organizing integrated energy systems. Projects include research, design and applications in areas of convective drying of agro-industrial products, solar ponds, medium temperature liquid collectors using rural technology, rural energy surveys and design and planning of eco-communities using renewable energy resources.

Type of Research :

Theoretical  
Applied and developmental

Technical Areas of Interest :

Biomass/Bioconversion - General  
Conservation  
Solar - General  
Solar Thermal Energy

85. Tata Institute of Fundamental Research,  
Radio Astronomy Centre,  
P. B. No. 8,  
Ootacamund 643 001.

Contact :

Mr. V. Balasubramanian,  
~~Fellow.~~

**Tata Institute of Fundamental Research (Contd.)**

Phone Number :

2651, 2032.

Telex Number :

853-241.

Cable :

RADASTRO.

Type of Orgn. :

National Government.

Description of Orgn. :

Radio Astronomy Centre is part of the Tata Institute of Fundamental Research, Bombay, which is a national centre of the Government of India for nuclear science and mathematics and is funded by the Department of Atomic Energy of the Government of India. TIFR carries out both theoretical and experimental research in several fields of mathematics, physics, astronomy and molecular biology and also solid state electronics, microwave engineering, and computer science. Research in solar thermal energy utilization using concentrators is being done at the Radio Astronomy Centre, Ootacamund, where the Radio Astronomy Group operates several large radio telescopes at metre wavelengths.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Solar Thermal Energy

86. **Thapar Institute of Engineering and Technology,  
Patiala 147 001.**

Contact :

Dr. Gajendra Singh,  
Head, Mechanical Engg. Dept.

Phone Number :

3270.

**Thapar Inst. of Engg. & Tech. (Contd.)**

Type of Orgn. :

Academic.

Type of Research :

Applied and developmental

Technical Areas of Interest :

Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Hydropower  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

87. Kerala Sastra Sahitya Parishath,  
Parishad Bhavan,  
Trivandrum 695 001.

Contact :

Dr. K.I. Vasu,  
Member.

Phone Number :

7449.

Cable :

UNICOCHIN.

Type of Orgn. :

Non-Governmental.

Description of Orgn. :

Kerala Sastra Sahitya Parishad is a professional science organisation engaged in the popularisation of science among the people by giving lectures, through other art media and publications. It publishes five magazines and gets support from government, public and other agencies.

Type of Research :

Policy Research



**Kerala Sastra Sahitya Parishath (Contd.)**

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Hydropower  
Solar - General  
Wind

88. University of Calcutta,  
Bengal Engineering College,  
Dept. of Post Graduate Training,  
Howrah 711 103.

**Phone Number :**

674561(Off.) 445776(Resl.).

**Contact :**

Prof. (Dr.) Sanat Biswas.

**Cable :**

TECHNICS, HOWRAH WEST BENGAL, INDIA.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

An engineering educational institution under University of Calcutta and administered by Govt. of W. Bengal.

**Type of Research :**

Basic, Theoretical and Fundamental

**Technical Areas of Interest :**

Conservation  
Geothermal Power  
Hydropower  
Ocean Energy (thermal, tidal, wave)  
Solar Thermal Energy  
Wind

89. University of Kalyani,  
Kalyani,  
West Bengal 741 235.

Contact :

Dr. Paritosh Basu,  
Scientific Officer.

Acronym of Or n. :

USIC.

Phone Number :

Kalyani 220, 286, 477, 478 ext. USIC.

Type of Or n. :

Academic.

Description of Orgn. :

The University was founded in 1960 and the solar energy research activities started in 1973. A course on alternative energy sources is being offered as part of post graduate programme.

Type of Research :

Basic, Theoretical and Fundamental  
Applied and developmental

Technical Areas of Interest :

Photovoltaics  
Solar - General

90. University of Poona,  
Chemistry Dept.  
Pune 411 007.

Contact :

Dr. H. J. Arnikar,  
Emeritus Prof.

Phone Number :

56061 ext. 58.

Cable :

UNIPUNA.

**University of Poona (Contd.)**

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

University of Poona is a statutory body established by an Act of the State Legislature.

**Type of Research :**

Basic, Theoretical and Fundamental

**Technical Areas of Interest :**

Biomass/Bioconversion - General  
Geothermal Power  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

91. University of Roorkee,  
Dept. of Physics,  
Roorkee 247 672.

**Contact :**

Mr. N.C. Varshneya,  
Professor.

**Cable :**

VARSHNEYA PHYSICS UNIVERSITY ROORKEE.

**Type of Orgn. :**

Academic.

**Description of Orgn. :**

The University is an autonomous academic organisation for research and teaching in mathematical sciences, technologies and engineering. Its support comes from the Government and research aiding organizations.

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental

University of Roorkee (Contd.)

Technical Areas of Interest :

Biomass/Bioconversion - General  
Alcohol Fuels  
Fuel Wood and Charcoal  
Conservation  
Draft Animals  
Geothermal Power  
Hydropower  
Photovoltaics  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

92. Vedhshala's Ambaji Astrophysical &  
Geophysical Observatory,  
Vedhshala,  
Near Naranpura Rly. Crossing,  
Ahmedabad 380 013.

Contact :

Dr. Pramod Dinanath Angreji,  
Director.

Acronym of Orgn. :

VEDHSHALA.

Phone Number :

450164.

Cable :

VEDHSHALA (AHMEDABAD 13).

Type of Orgn. :

Academic.

Description of Orgn. :

Vedhshala is carrying out research in astronomy; ancient astronomy in India; mass education and popularisation of astronomy and other sciences. It has two outstations - one at Udaipur for solar astronomy and the other at Ambaji Astrophysical and Geophysical Observatory.

**Vedhshala's Ambaji Astrophysical &  
Geophysical Observatory (Contd.)**

**Type of Research :**

Basic, Theoretical and Fundamental  
Applied and developmental

**Technical Areas of Interest :**

Solar Heating and Cooling  
Solar - General  
Wind

**93. Vikram Sarabhai Space Centre,  
Trivandrum 695 002.**

**Contact :**

Dr. M.K. Mukherjee,  
Head, Materials Group.

**Phone Number :**

56-2444 & 56-2555.

**Telex Number :**

048-201 & 048-202.

**Type of Orgn. :**

National Government.

**Description of Orgn. :**

Research and development on space science and  
technology including dissemination of information  
to the industries at large for spin-off utilization.

**Type of Research :**

Fundamental  
Applied and developmental

**Technical Areas of Interest :**

Alcohol Fuels  
Solar - General  
Solar Thermal Energy  
Alternate energy sources  
including their biomedical  
application

Photovoltaics  
Solar Heating and Cooling  
Wind

94. Vivekenanda Kendra,  
Yoga Shiksha Vibhag,  
Vivekanandapuram,  
Kanyakumari 629 702.

Contact :

Dr. H.R. Nagendra,  
Secretary, Yoga Shiksha Vibhag.

Affiliated Orgns. :

Ramakrishna Mahasammelan Ashram,  
Nagdandhi, Kashmir.  
About 45 branches spread all over India.

Phone Number :

Kanyakumari 32.

Cable :

SHILASMARAK.

Type of Or. n. :

Other.

Description of Or. n. :

A service mission engaged in the following service activities : rural development programmes especially in the deep interior hilly and tribal regions for agricultural development, adoption of appropriate technology in these areas.

Technical Areas of Interest :

Biomass/Bioconversion - General  
Fuel Wood and Charcoal  
Ocean Energy (thermal, tidal, wave)  
Solar - General  
Solar Heating and Cooling  
Solar Thermal Energy  
Wind

95. Water & Mineral Exploration Research  
& Training Institute,  
1-36, Z. P. Street,  
No. 6, Tarnaka,  
Hyderabad 500 007.

Contact :

Mr. K. A. S. Mani,  
Geologist.

Acronym of Orgn. :

WAMERTI.

Phone Number :

71565.

Type of Orgn. :

Private.

Description of Orgn.

WAMERTI is primarily involved in the development of small and marginal farmers by means of developing technologies that can effectively utilize available resources. The field of involvement includes the developing of low cost water management techniques and scope for harnessing wind and solar energy and biodynamic farm systems. Financed by the parent organization (WDS), a non profit making society involved in the manufacture of drilling rigs located at Moula Ali, Hyderabad, India.

Type of Research :

Developmental  
Policy Research

Technical Areas of Interest :

Bioconversion - General  
Conservation  
Solar - General  
Solar Heating and Cooling  
Wind

